
User's Reference

This chapter contains a general overview of the main Call Accounting functions as they are accessed from its main window. It briefly describes their main function and purpose. For complete details on each of these functions and their operation, you should refer to your on-line help.

File menu

This menu contains functions used to select an output device, set up a printer and exit from Call Accounting.

To access these functions, click **File** from the main window and select from the following menu items:

- Select Output Device
- Print Setup
- Close

Report menu

The Call Accounting reports provide information on the details of the call records which were collected from the Meridian 1. They also include information on your system databases and configurations. Each report appears in the Reports drop-down menu under its specific cascading menu.

To set up and run your reports, first select your output device and then select your reporting filters (or parameters). Each report begins with a banner page indicating the reporting filters for that report. Keep this information attached to the report for reference purposes.

The following is an example report which is generated from Call Accounting.

Table 1
Extension Detail Report

Acme Limited

Dallas, TX

Extension Detail Report

Extension: 216 - Smith, J.

Department: MARKETING

Division: SALES

Page: 1

Date: 05/18/95

Digits Dialed	Location	Date	Time	Duration	Cost	Route Used	Comments
9 1 214 555-5692	DALLAS TX	05/17	11:16	45:00	23.29	DDD	TTL INC.
9 1 713 555-5777	HOUSTON TX	05/17	11:31	12:00	4.42	DDD	
9 1 214 665-5430	HOUSTON TX	05/17	11:37	7:00	2.58	DDD	
9 1 214 555-2837	HOUSTON TX	05/17	11:37	16:00	9.02	DDD	
9 1 713 555-9275	DALLAS TX	05/17	11:40	1:00	0.39	DDD	
9 1 214 555-5111	DALLAS TX	05/17	11:42	2:00	0.74	DDD	
9 1 212 555-6419	NEW YORK NY	05/17	11:43	1:00	0.39	DDD	
9 1 212 555-0211	NEW YORK NY	05/17	11:43	33:00	18.60	DDD	
9 1 212 555-9275	NEW YORK NY	05/17	11:44	1:00	0.39	DDD	
9 1 713 555-5347	HOUSTON TX	05/17	11:46	1:00	0.39	DDD	
9 1 719 555-1000	PUEBLO CO	05/17	11:47	15:00	8.45	DDD	
Report Totals:							
# Calls		Minutes		Min/Call		Cost	
In	Out	In	Out	In	Out	In	Out
0	11	0:00	134:00	0:00	12:11	0.00	68.64
Total:		0 11		0:00 134:00		0.00 68.64	
Cost/Call		In		Out			
		0.00		6.24			
Reviewed By: _____ Approved By: _____							

The following paragraphs describe the common options which are presented before running a report.

Sort Order: This option allows you to select the order in which the directories are first sorted. By sorting this file in the appropriate order, the system organizes the report data in a way that best suits your needs.

Initialize Summary File: This option allows you to reset or clear the Summary file. This is necessary when the system generates a new set of results. Turn the **Initialize summary file** check box on if changes were made to the report filters since the Summary file was first created.

Produce Summary Data: This option causes the system to save the extension detail totals in the Summary file. The system then uses this file in the production of other reports. If you run the report again using different filters, you should regenerate this file to ensure that the extension totals are consistent with the newly selected data. However, you may decide not to initialize the Summary file if the new totals are to be added to the existing summary data.

Schedule: If you wish to schedule each of these reports to run at a specific date and time, click **Schedule** from their respective report setup dialogs. This will invoke the MAT Common Services Scheduler application in which you can select the date and time for later reporting. The Scheduler will then generate the selected report at the predefined date and time.

When you schedule a report to run using the MAT Scheduler, the output device of the scheduled report is determined by the Select Output Device option which was selected at the time when the report is scheduled.

Select Report Filters

Call Accounting allows you to generate reports based on data which meets a variety of report criteria. If you do not set report filters, the reports will include all the CDR data in the Call Database (e.g., every department instead of a particular one).

Cost allocation reports

The cost allocation reports provide costing details and summaries for the calls collected from the Meridian 1. These include accumulated summary reports based on department, division or corporate totals. To access these reports, click **Cost Allocation** from the Reports drop-down menu and then select the appropriate report from its cascading menu.

The following is a list of these reports:

- Exception/Chronological Report
- Extension Detail Report
- Department Summary Report
- Division Summary Report
- Corporate Summary Report

- Account Code Report
- Account Code Summary Report
- Account Code Summary by Extension Report
- Undisbursed Verification Report
- Undisbursed Summary Report
- Authorization Code Report

Trunk analysis reports

The trunk analysis reports list information for your telephone system's trunks. To access this list of reports, click **Trunk Analysis** from the Reports drop-down menu. Select the appropriate report from the Trunk Analysis cascading menu.

The following is a list of these reports:

- Trunk Utilization Report
- Trunk Detail Report
- Trunk Graph
- Tandem Tie Report

Directory/Configuration reports

The directory/configuration reports list information on your Call Accounting directories and Telephone Configuration Database. This includes a diagnostic for your Configuration File. To access these reports, click **Directory/Configuration** from the Reports drop-down menu and select the desired report from its cascading menu.

The following is a list of these reports:

- Billing Database Report
- Customer Directory Report
- Configuration Diagnostic Report

Frequency reports

The frequency reports provide details and summaries on calls based on calling line ID, ring time, call duration, hold time (if supported) or unanswered calls. To access these reports, click **Frequency** from the Reports drop-down menu and select the appropriate report from its cascading menu.

The following is a list of these reports:

- Customer Summary Report
- Frequently Called Numbers Report
- Digits Detail Report
- Calling Line Frequency Report
- Calling Line Summary Report
- Ring Time Summary Report
- Call Duration Summary Report
- Hold Time Detail Report
- Hold Time Summary Report
- Unanswered Call Detail Report
- Unanswered Call Summary Report
- Location Summary Report
- Area Code Summary Report

Export Detail Definition

The Export Detail Definition function is used to define and generate a report to disk so it can be used by other database and spreadsheet programs. This is useful in cases where you wish to output information obtained from the CDR data and format it to suit your needs.

With this function, you can export CDR data to such formats as: fixed field, comma delimited and dBase III. With the dBase III format, call record data can be directly exported to formats used by today's more popular spreadsheet and database programs such as: MS Excel™ and Access™, Lotus 123™ and dBase™.

To define and generate an export report, click **Export Detail Definition** from the Reports drop-down menu. From the Export Detail Report dialog, you can create and edit the parameters for the export report.

Graphs

When you select the Graphs function, the system will display a graph of its data. You can then edit the attributes of the graph and then save it as a bitmap file. You can also print a graph directly from the screen to the desired output. In addition, when you print a graph from the screen, you can reset the scaling and print layout of the graph.

To access this function, click **Graphs** from the Reports drop-down menu. This function allows you to select the display parameters of a graph. This dialog contains standard editing features such as: Open, Save and Save As. In addition, you can specify parameters for this graph by clicking **Filters**.

Graphics Services module

The Graphics Services module provides graph generating functions for supported MAT applications. Use this module to edit the attributes of a graph which is generated from another MAT application and then print it or save it as a bitmap file.

Database menu

Call Accounting uses a number of databases and directories which provide costing and maintenance support for its call records. It relies on the proper maintenance of its databases to operate efficiently. Improper data management can often lead to the following:

- Lost data in the event of a disk crash when no backups have been performed
- Missing historical data because data was not archived
- Long processing times due to outdated data
- Hard disk drives filled to capacity at which point you must remove and purge data before proceeding with normal operations

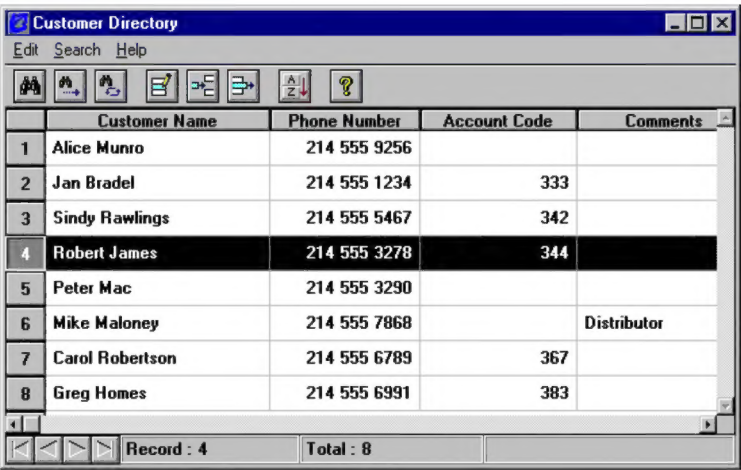
The following is a summary of the databases and functions which you can select from the Database drop-down menu.

Customer Directory

The Customer Directory is used to identify commonly called telephone numbers on the reports that are generated. It can also maintain a listing of your frequently called customers or clients. When the system matches an account code when you generate account code reports, it prints the name corresponding to that telephone number in the Customer Name field on the report.

The following is an example Customer Directory.

Figure 9
Customer Directory



	Customer Name	Phone Number	Account Code	Comments
1	Alice Munro	214 555 9256		
2	Jan Bradel	214 555 1234	333	
3	Sindy Rawlings	214 555 5467	342	
4	Robert James	214 555 3278	344	
5	Peter Mac	214 555 3290		
6	Mike Maloney	214 555 7868		Distributor
7	Carol Robertson	214 555 6789	367	
8	Greg Homes	214 555 6991	383	

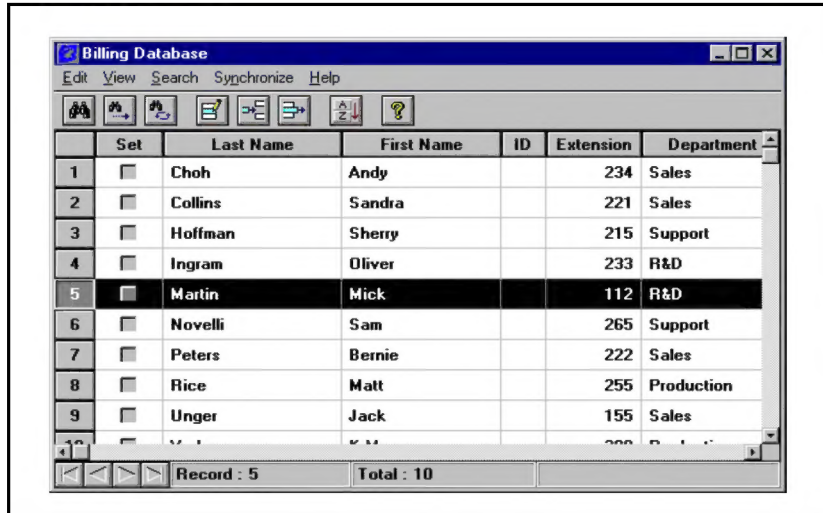
Record : 4 Total : 8

Billing Database

The Billing Database contains information which is generated from the Set Database and Custom Database of MAT Station Administration and provides information to the system for organizational purposes. Call Accounting uses the data entered in this database to accumulate and assign costs by extension, department, division and for the organization as a whole.

When you access the Billing Database, Call Accounting will index the database to build the department and division files. It will not index these files after this initial access unless the department and division files change.

Figure 10
Billing Database



	Set	Last Name	First Name	ID	Extension	Department
1	☐	Choh	Andy		234	Sales
2	☐	Collins	Sandra		221	Sales
3	☐	Hoffman	Sherry		215	Support
4	☐	Ingram	Oliver		233	R&D
5	☐	Martin	Mick		112	R&D
6	☐	Novelli	Sam		265	Support
7	☐	Peters	Bernie		222	Sales
8	☐	Rice	Matt		255	Production
9	☐	Unger	Jack		155	Sales
10	☐					

Record : 5 Total : 10

Backup All Databases

If you need to make a backup copy of some or all of the database files, use the Backup All Databases function. The backup command will save the data files specified for the current system.

Note: This will only make a backup copy of the Call Accounting database files. If you wish to backup other MAT system files, then use the application to which the database files belong or use the MAT Site Configuration application.

Restore All Databases

The Restore function allows you to restore any backup data by copying the Call Accounting database files you had previously backed up to the current databases.

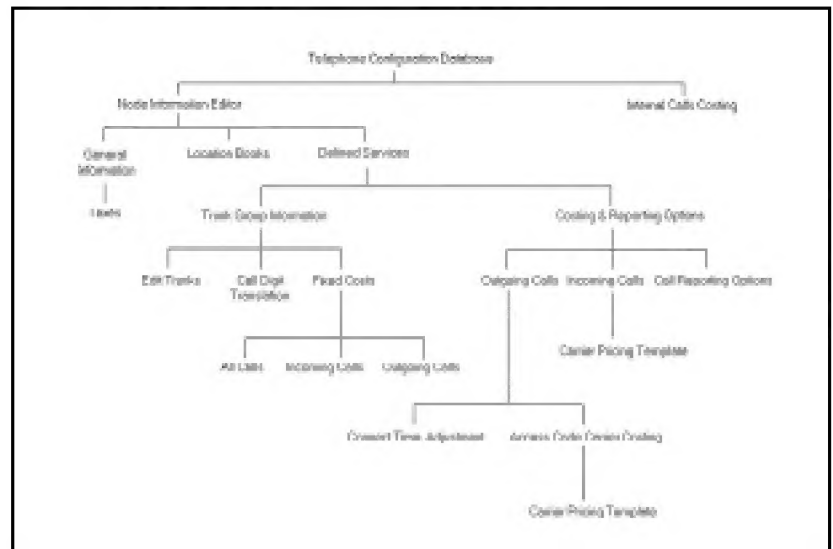
Telephone Configuration Database

The Telephone Configuration Database is the key to pricing calls and tracing them to their destinations. It defines the type of costing used through each trunk (e.g., DDD, DID, Tie Line) and includes any additional costs defined for your system and location. Each defined service uses predefined location books and rate tables based on the offerings of your telecommunications carrier. Call Accounting can then use this telephone configuration information to properly cost the call records collected from the Meridian 1 and generate reports.

It is critical that you keep the Telephone Configuration Database up-to-date as changes occur in your telephone system. Pay particular attention to the number of trunk lines used in your system and the free local calling areas. If these free local calling exchanges are not updated, then local calls may be priced as long distance calls.

The following is a schematic of the Telephone Configuration Database menus as they are accessed from the main window.

Figure 11
Schematic of Telephone Configuration Database

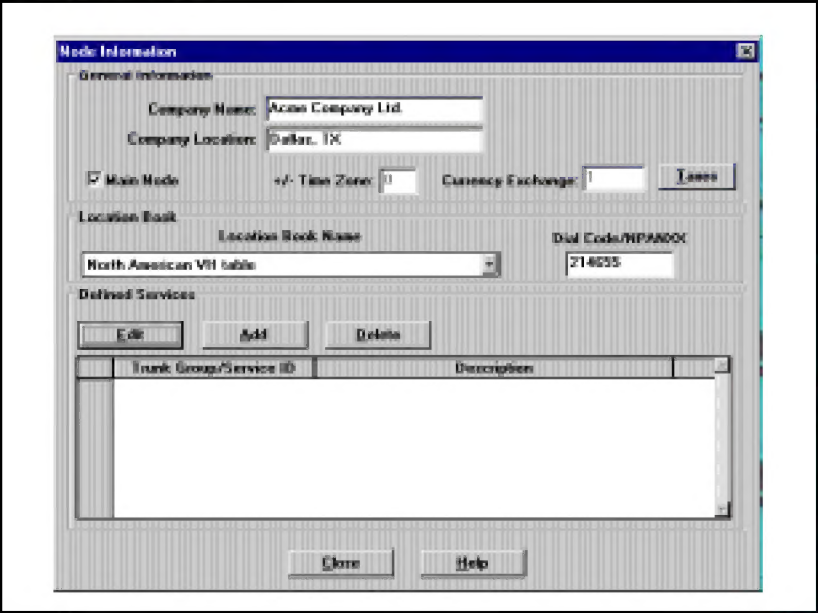


To access the Telephone Configuration Database, click **Telephone Configuration** from the Database drop-down menu. The following sections will describe a each feature of the Telephone Configuration as it appears in the menu.

Node Information Editor

You must define the costing for each node on your network. Each line in this grid represents an individual node. If you have only one system, then you only need to define one node. Otherwise, you must define each node's configuration (e.g., home, office, plants, etc.). For each node that is added to this list, you can enter its general description, location book, name, dial code and trunks.

Figure 12
Node Information



Internal Calls Costing

The Internal Calls Costing function allows you to apply costs to calls made within a system. These internal calls are made in the Meridian 1 from station to station. If you wish to calculate a cost for your company's internal calls and, if the main node produces records for such calls, then use this function to enter these costs.

System Call Digit Translation

The System Call Digit Translation function allows you to translate the digits dialed on call records for all trunk groups. This allows Call Accounting to process and print a different pattern from the one that is actually dialed. For example, the digit pattern '917135551234' could be re-interpreted as '812145551234'.

Note: Call Digit Translation does not affect CLID/ANI digit patterns on incoming calls.

The System Call Digit Translation function translates the digits dialed in all of the call records in this system prior to the trunk group Call Digit Translation function.

Note: The digit pattern translated by the System Call Digit Translation function may be translated again using the trunk based Call Digit Translation function. You should therefore be careful when using this function.

Utilities

The Call Accounting database utilities provide added commands which will assist you in managing your Call Database and help in system diagnostics.

To access these functions, click **Utilities** from the Database drop-down menu and click the desired function name in its cascading menu.

Call Database

The Call Database editor allows you to display and edit the Call Database records. In some cases, it may be necessary to edit or delete some call records of this database due to corrupted dates or IDs. This allows you to remove bad or unwanted sections of the database or replace invalid dates with valid dates.

Display Index File

The Index file (INDEX1.DAT) contains the indexing information used to sort the Call Database (MDR1.DAT) from the raw data file collected from the Meridian 1. Use the Display Index File function to scan through the records in the current system's Index file. This is a diagnostic tool which your support personnel use to determine the source of a reporting or costing problem.

ReIndex Call Database

In some cases, the Call Database may not be correctly sorted with the Index file. This can be caused by edits to the Call Database or by some system failure which may cause it to lose records. This can cause problems such as unsuccessful or inaccurate reporting. The ReIndex Call Database function corrects the Index file to match the Call Database.

List Call Database Dates

This function lists the dates of the call records for the current system's Call Database. Use this function to search for any invalid dates in the Call Database before generating your reports. If you find any incorrect dates, use this editor to search for and remove these call records from the Call Database.

Account Code Editor

Use this function to edit the account codes for call records in the Call Database after they have been collected from the Meridian 1. Once a call is stored in the Call Database, you can use this editor to add an account code to the call or modify an existing one. You can locate a call by selecting a telephone extension and reviewing each call for that extension.

Text File Editor

Call Accounting provides you with a method of modifying your existing text files (e.g., AUTOEXEC.BAT file). When you click **Text File Editor** from the Database drop-down menu, Call Accounting invokes the Windows Notepad utility. Use this editor to open any text files, edit them and save them again.

Reporting Options

The Reporting Options function allows you to set the features over the entire system which determine what will appear on selected reports. To access this function, click **Reporting Options** from the Database drop-down menu.

Note: To set the reporting options for any specific trunk, refer to the section Costing and Reporting Options. To set the reporting options on a digit pattern basis, refer to the section Call Reporting Options.

Figure 13
Reporting Options

Reporting Options

☒ Include Account Calls
☐ Replace Acct. Code by Name
☐ Reports by Auth. Code
☒ Export Other Billable Items
☒ Include Auth. Code Calls
☐ Replace Orig ID with Inc ID

☒ Insert Page on Reports
☐ Use Acct. as Auth. Code
☒ Use Summary on Reports
☐ Update Data Before Reporting
☐ Approximate Distance Calculation

Cost Summary Fields

Field 1: HDD Field 2: MDD Field 3: MTC
 Field 4: MDD Field 5: MTC

Bottom Line Message on Reports

Message 1: Rejected By: _____ Approved By: _____
 Message 2: _____
 Message 3: _____

OK Cancel Help

Other Billable Items

The Other Billable Items function is used to assign any additional calls which are not being recorded by the Meridian 1 to a station. Use this function to enter costing information for calling criteria such as calling card calls or cellular calls. To assign these costs to the appropriate extension, you must either transfer the data from a file or you must copy the information from the printed credit card or telephone bill.

If the items you wish to enter are stored in a file in a format supported by Call Accounting, then you can transfer this data to the Other Billable Items database file ADDMDR1.DAT. If the items you wish to enter in this database cannot be transferred directly to the file, then you must type in the information from the source bill. Use the Other Billable Items editor dialog to enter this information.

System Options

This function contains specific system options that you enable for optimum system performance. Return to this function to change these options throughout your Call Accounting session.

Location Books & Rate Tables

The Location Books and Rate Tables provide the global pricing information and rate tables for your Telephone Configuration Database. Before you define your Telephone Configuration Database, you must ensure that the rate tables and templates have been defined.

Use the following functions to define the location books, carrier pricing templates and rate tables:

- Location Book Registry
- Carrier Pricing Templates
- Call Type Definition
- Edit Variable Rate Table

Location Book Registry

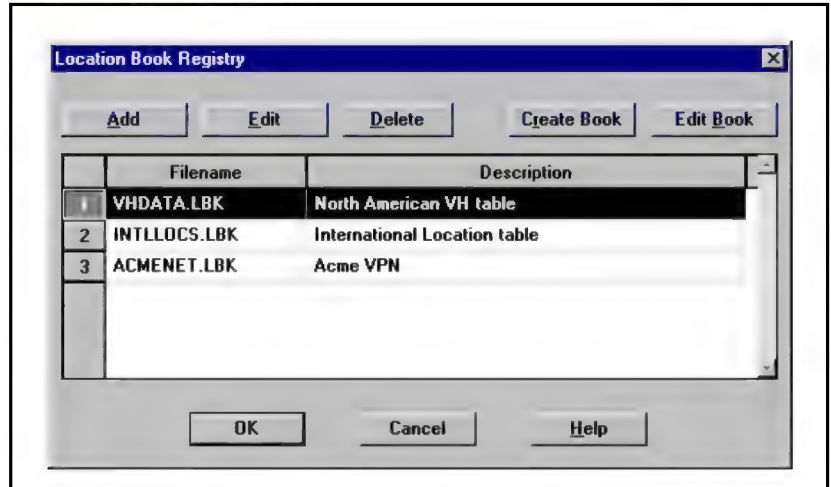
Location books contain the terminating location identified by the dial codes or area codes. Some location books such as V&H or Dial Code V&H consist of the vertical and horizontal coordinates which are used to calculate distances between different destinations. When calls are costed based on distance, the system uses the coordinates in these location books to calculate the distance between the points.

Call Accounting includes a set of predefined location book files which can be used in calculating distances between the different call destinations. It will read the digits dialed in the call record and will locate them in the location books. If the call was made over a trunk that is costed using measured distance rates, then it can be costed based on the distance between the node and the destination.

Each location book file can be assigned to a record in this database. These files can then be referenced from the functions which will calculate the distance-based costs of the calls.

The following is an example Location Book Registry dialog.

Figure 14
Location Book Registry

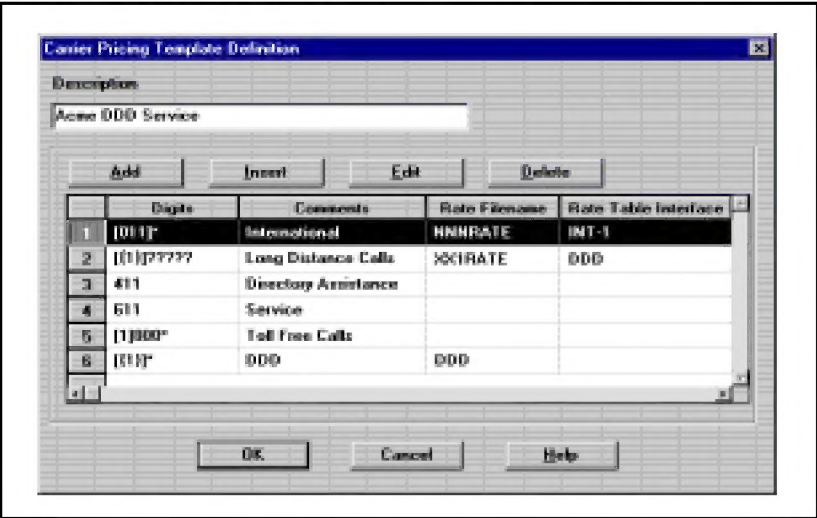


Carrier Pricing Templates

Use the Carrier Pricing Templates editor to define the criteria which determines the type and cost of a call. This information is based on the digits dialed, time of day and date.

The following is an example Carrier Pricing Templates dialog.

Figure 15
Carrier Pricing Templates Definition



Call Type Definition

The Call Type Definition function allows you to specify the different types of calls used when you are defining the trunk usage of calls. This will distinguish the types of calls to allow for different costing to be applied to each call matching the call criteria.

Edit Variable Rate Table

Call Accounting includes common rate tables offered by the different carriers. The rate tables contain the required rates and coverage areas which define the locations (area codes, exchanges, etc.) from where calls are made. This way, the system will know which call will be costed with which rate.

The following is an example Rate Interface Editor dialog.

Figure 16
Rate Interface Editor

Rate Interface Editor - Acme Company - Head Office

Buttons: Add, Insert, Delete

	R.T.L.	Description	Rate Type	Table
1	DDD	Long Distance Rates	Measured	DDD
2	INT-1	International Rates 1 (60,60)	INT'L	TGLB
3	INT-2	International Rates 2 (60,3)	INT'L	TGLB
4	INT-3	International Rates 3 (30,6)	INT'L	TGLB
5	INT-4	Advantage Rates	INT'L	INT-4
6	INT-5	Discounted Rates for Area C	INT'L	STN

Buttons: Measured Distance Rates, Volume Discount Plan, Point to Point Rates, International Rates, Volume Affected Rates, Charge Bands, Coverage Area Tables, OK, Cancel, Help

Use the following order of operations when setting up and implementing your rate tables.

- 1 Create rate tables using the Measured Distance Rates, Point to Point Rates, Volume Affected Rates, International Rates or Charge Band editors.
- 2 Define any coverage areas using the Coverage Area Tables editor (optional).
- 3 Define any volume discount plans using the Volume Discount Plan editor (optional).
- 4 Enter the rate table codes and any supporting information such as descriptions and pricing periods in this grid.

Communications menu

The Communications function performs the first step in processing CDR data. It collects the data from the Meridian 1 through an optional buffer unit and stores it for processing. It is used to set up communications between the PC and your Meridian 1 and perform data collection.

The following is a brief summary of the functions and commands in the Communications menu.

Communications Database

The Communications Database contains the information necessary to poll and index call data from the Meridian 1 or optional buffer unit to your PC's disk drive for data processing.

The following is an example Communications Database dialog.

Figure 17
Communications Database

Communications Database

Selected Profile		Collection parameters	
Name	Type	Comm Port	☐ Collect
Pro1	Serial	2	☐ Index
Connection Parameters		☐ Auto Backup	
Data Rate	Stop Bits	Parity	Delay (min)
9600	1.00	None	0
Data Bits	Delay (secs)	Timeout (secs)	
8	3	30	
System Access		Script Setup	
Modem Script	Phone number	☒ Poll	
Modem Access ID	Modem Password	☐ Continuous	
Buffer Equipment Type		Name	
None		File Setup	
		☐ File Collection	
		Filename	
OK		Cancel Help	

Data Collection

Data Collection is the process of transferring the call detail data from the Meridian 1 or optional buffer unit to the raw Call Detail file `DETAIL1.DAT` on your system disk. Call Accounting will then index this raw data file and save it to the Call Database `MDR1.DAT` when a data collection option is initiated.

Collecting and indexing

Data collection is a two step process. During the first step, the system collects the data from the Meridian 1 through the optional buffer unit and stores it in the raw Call Detail file. The second step involves appending this file into the Call Database.

Schedule Data Collection

You can set up Call Accounting to collect and index the call detail records from the Meridian 1 by setting up the MAT Common Services Scheduler application. By providing basic information in the initial setup, you can signal Call Accounting to collect and/or index these call records at a scheduled date and time.